UNIT III

HOW TO PERFORM RCM

Module 7

SELECTING TASK OR OTHER OPTIONS

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Module Preview:

Introduction

- **Introduction**
- **Choosing the Best Solution**
- **Review and Summary**

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Module Objective:

Introduction

This module will provide information on selecting preventive maintenance tasks for implementation after applicable tasks have been identified:

1. **Introduce methods of performing PM task cost analysis**
2. **Identify methods to evaluate the operational consequences of various PM tasks**
3. **Describe the process used to select appropriate PM tasks for implementation.**

RCM Process

Choosing Best Solution

PLANNING AND PREPARATION

1. Identify Team and responsibilities
2. Identify analysis items
3. Prioritize Items
4. Identify and document Review Process
5. Orientation/Training
6. Ground Rules and Assumptions

ANALYSIS

1. Equipment Kick-off Meeting
2. Initial Data Gathering
3. Hardware Partition
4. Function
5. Functional Failure
6. Failure Mode
7. Failure Effects
8. Failure Consequences
9. Task Evaluation
10. Task Selection

IMPLEMENT RESULTS

1. Package Maintenance Task
2. Implement Other Actions

SUSTAIN

1. Emergent Issues
2. Age Exploration
3. Hardware Changes
4. Trend/degrader analysis
5. Document Reviews

Results

Analysis Approach/ RCM Plan

Maintenance Requirements

Maintenance Program

Data

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Options:

Choosing Best Solution

Best solution for reducing consequences of failure to an acceptable level may be achieved by:

- **Performing one of the five PM tasks**
- **Perform combination of two or more tasks**
- **Allow failure mode to occur**
- **Take some other action**

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Basis for Decisions:

Choosing Best Solution

- **At this point in analysis each option has already been shown to reduce the consequences of failure to an acceptable level**
- **A solution that contains any of these options will meet the organization's criteria**
- **Safety and mission were addressed in the task evaluation**

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Considerations:

Choosing Best Solution

- **Operator/Maintainer opinion: Buy-in**
- **Risks: New technology, etc.**
- **Data Sensitivity and accuracy**

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Basis for Decisions:

Choosing Best Solution

The best solution at this point will be determined by evaluating:

- **The cost of executing that solution and….**
- **The consequences the solution will have on the organization's operations**

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Cost:

Choosing Best Solution

There are several methods of determining cost

- **Develop cost/availability comparison methods**
- **IRCMS (contains cost equations)**
- **Look at cost of similar existing tasks**

Different Organizations may use different equations or methods

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Operational:

Choosing Best Solution

- **A less expensive option may not be best solution when operational factors are considered**
  - **A less expensive option may require more down time or administrative resources**
- **The best overall option should be chosen**
  - **Decision may be subjective**

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Review and Summary

Module Objective

Introduction

Choosing the best Solution

- Basis for Decisions
  - Cost
  - Operational Consequences

End of Module

up next.....

Analytical Methods